

In the Claims

1. (currently amended) A method for performing device address assigning functionality in ~~intelligent hardware~~ an intelligent data concentrator, said method comprising:

receiving a network access request from ~~an electronic~~ a client device communicatively coupled to said intelligent ~~hardware~~ data concentrator;

transmitting a device address request to ~~a network~~ an Ethernet local area network (LAN) server communicatively coupled to said intelligent ~~hardware~~ data concentrator;

receiving a first device address from said ~~network~~ Ethernet LAN server communicatively coupled to said intelligent ~~hardware~~ data concentrator; and

assigning a second device address to said ~~electronic~~ client device communicatively coupled to said intelligent ~~hardware~~ data concentrator;

wherein said intelligent ~~hardware~~ data concentrator is ~~wall-mountable~~ configured to be mounted internally within a wall such that and ~~comprises a user-accessible surface such that a user is provided of the intelligent data concentrator is external to and substantially planar with an exterior surface of the wall to provide~~ direct access to said intelligent ~~hardware~~ data concentrator.

2. (currently amended) A method as recited in Claim 1 wherein said intelligent hardware comprises:

a first interface for communicatively coupling said intelligent hardware to a network, said network comprising said Ethernet LAN ~~network~~ server;

a second interface for communicatively coupling said intelligent hardware to a plurality of said ~~electronic client~~ devices such that each said ~~electronic client~~ device is communicatively coupled to said Ethernet LAN network;

a processor coupled to said first interface and said second interface;
and

a device address retriever coupled to said processor.

3. (currently amended) A method as recited in Claim 1 wherein said first device address and said second device address are ~~an~~ IP addresses.

4. (original) A method as recited in Claim 1 wherein said Ethernet LAN network server comprises a DHCP server.

5. (original) A method as recited in Claim 1 wherein said first device address is the same as said second device address.

6. (original) A method as recited in Claim 1 wherein said first device address is a global device address.

7. (original) A method as recited in Claim 1 wherein said second device address is a private device address.

8. (currently amended) A method for performing device address assigning functionality in ~~intelligent hardware~~ an intelligent data concentrator, said method comprising:

receiving a network access request from ~~an electronic~~ a client device communicatively coupled to said intelligent hardware, said intelligent ~~hardware~~ data concentrator having a first device address, wherein said intelligent ~~hardware~~ data concentrator is ~~wall-mountable~~ configured to be mounted internally within a wall such that and comprises a user-accessible surface such that a user is provided of the intelligent data concentrator is external to and substantially planar with an exterior surface of the wall to provide direct access to said intelligent hardware data concentrator.; and assigning a second device address to said ~~electronic client~~ device communicatively coupled to said intelligent ~~hardware~~ data concentrator, such that said intelligent ~~hardware~~ data concentrator eliminates the need for a separate device address assigning server.

9. (currently amended) A method as recited in Claim 8 wherein said intelligent ~~hardware~~ data concentrator comprises:

a first interface for communicatively coupling said intelligent ~~hardware~~ data concentrator to ~~a network~~ an Ethernet local area network (LAN);

a second interface for communicatively coupling said intelligent ~~hardware~~ data concentrator to a plurality of said ~~electronic client~~ devices such that each said ~~electronic client~~ device is communicatively coupled to said Ethernet LAN network;

a processor coupled to said first interface and said second interface; and

a device address assignor coupled to said processor.

10. (original) A method as recited in Claim 8 wherein said first device address and said second device address are IP addresses.
11. (original) A method as recited in Claim 9 wherein said device address assignor is a DHCP server.
12. (original) A method as recited in Claim 8 wherein said first device address is the same as said second device address.
13. (original) A method as recited in Claim 8 wherein said first device address is a global device address.
14. (original) A method as recited in Claim 8 wherein said second device address is a private device address.
15. (currently amended) An intelligent ~~device~~ data concentrator for performing device address assigning functionality comprising:
- a ~~wall-mountable~~ housing configured to be installed internally within a wall;
 - a first interface for communicatively coupling said intelligent ~~device~~ data concentrator to ~~a network~~ an Ethernet local area network (LAN);
 - a second interface for communicatively coupling said intelligent ~~device~~ data concentrator to a plurality of ~~electronic~~ client devices such that each said ~~electronic~~ client device is communicatively coupled to said Ethernet LAN network, wherein said second interface ~~is comprised within a user-accessible surface~~ is external to and substantially planar with an external surface of the wall to provide a ~~such that a user is provided direct~~

~~access to said intelligent hardware~~ plurality of communication ports, each communication port providing the communicative coupling for one of the plurality of client devices;

a processor coupled to said first interface and said second interface;
and

a device address retriever coupled to said processor for retrieving a first device address for said intelligent ~~device~~ data concentrator from a network server of said Ethernet LAN network and for assigning a second device address to said ~~electronic client~~ device;

wherein said first interface, said second interface, said processor and said device address retriever are comprised within said ~~wall-mountable~~ housing.

16. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said first device address and said second device address are IP addresses.

17. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said network server is a DHCP server.

18. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said first device address is the same as said second device address.

19. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said first device address is a global device address.

20. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 15 wherein said second device address is a private device address.

21. (currently amended) An intelligent ~~device~~ data concentrator for performing device address assigning functionality, said intelligent ~~device~~ data concentrator having a first device address, said intelligent ~~device~~ data concentrator comprising:

a ~~wall-mountable~~ housing configured to be installed internally within a wall;

a first interface for communicatively coupling said intelligent ~~device~~ data concentrator to ~~a network~~ an Ethernet local area network (LAN);

a second interface for communicatively coupling said intelligent ~~device~~ data concentrator to a plurality of ~~electronic~~ client devices such that each said ~~electronic~~ client device is communicatively coupled to said network, wherein said second interface ~~is comprised within a user accessible surface is external to and substantially planar with an external surface of the wall to provide a such that a user is provided direct access to said intelligent hardware~~ plurality of communication ports, each communication port providing the communicative coupling for one of the plurality of client devices;

a processor coupled to said first interface and said second interface;
and

a device address assignor coupled to said processor for assigning a second device address to said ~~electronic~~ client device;

wherein said first interface, said second interface, said processor and said device address assignor are comprised within said ~~wall-mountable~~ housing.

22. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said first device address and said second device address are IP addresses.

23. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said device address assignor is a DHCP server.

24. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said first device address is the same as said second device address.

25. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said first device address is a global device address.

26. (currently amended) An intelligent ~~device~~ data concentrator as recited in Claim 21 wherein said second device address is a private device address.